



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

'Care about my animal, know your stuff and take me seriously'

Citation for published version:

Hughes, K, Rhind, SM, Mossop, L, Cobb, K, Morley, E, Kerrin, M, Morton, C & Cake, M 2018, 'Care about my animal, know your stuff and take me seriously': United Kingdom and Australian clients' views on the capabilities most important in their veterinarians', *Veterinary Record*. <https://doi.org/10.1136/vr.104987>

Digital Object Identifier (DOI):

[10.1136/vr.104987](https://doi.org/10.1136/vr.104987)

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Peer reviewed version

Published In:

Veterinary Record

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



TITLE: ‘Care about my animal, know your stuff and take me seriously’ - UK and Australian clients’ views on the capabilities most important in their veterinarians.

AUTHORS

Dr Kirsty Hughes is a Research Assistant in Veterinary Medical Education at the Royal (Dick) School of Veterinary Studies (R(D)SVS), The University of Edinburgh, Easter Bush Campus, Midlothian, EH25 9RG, UK. Corresponding email address: kirsty.hughes@ed.ac.uk. Tel: 0131 6517395

Professor Susan Rhind is Chair of Veterinary Medical Education and Director of Veterinary Teaching at the Royal (Dick) School of Veterinary Studies (R(D)SVS), Edinburgh, UK.

Dr Liz Mossop is Professor of Veterinary Education and Sub-Dean for Teaching, Learning and Assessment at the School of Veterinary Medicine and Science, University of Nottingham, Nottingham, UK.

Dr Kate Cobb is a lecturer in Veterinary Education at the School of Veterinary Medicine and Science, University of Nottingham, Nottingham, UK.

Mrs Emma Morley is a Senior Consultant Psychologist at the Work Psychology Group, London, UK.

Dr Máire Kerrin is a Director at the Work Psychology Group and Visiting Lecturer in Psychology at the Cass Business School, London, UK.

Dr Carolyn Morton is a Veterinary Clinical Lecturer working in the Veterinary Medical Education Department of the Royal (Dick) School of Veterinary Studies, Edinburgh, UK.

Dr Martin Cake is Associate Professor in Veterinary Anatomy and Associate Dean for Learning and Teaching in the School of Veterinary and Biomedical Sciences, Murdoch University, Perth, Australia.

WORD COUNT

4637 words

ABSTRACT

Success in veterinary practice requires careful balancing of stakeholder needs. The aim of this study was to investigate the current expectations and needs of veterinary clients across a range of practice types. Interviews and focus groups were undertaken with veterinary clients to identify the capabilities of veterinarians that result in the best client experience, generating a 'Veterinary Capability Framework'. This comprised six main capabilities each containing 4-10 behavioural indicators: Client Relationships; Professionalism; Communication Skills; Decision Making and Problem Solving; Commitment to Animal Welfare; and Commitment to Quality and the Profession. An online survey was then conducted to validate the importance of these capabilities, which was completed by 1446 mostly UK and Australian clients. The data have allowed us to develop a 'Client Hierarchy of Needs' which emphasises the fundamental importance of commitment to animal welfare and veterinary capabilities to the client experience. This study is part of the VetSet2Go project, a collaborative international project to define the capabilities most important for employability and success in the veterinary profession today.

INTRODUCTION

Veterinary practice is rapidly evolving and the needs and expectations of the various stakeholders are evolving with it. A veterinarian's ability to understand and attend to not only their own, but also their employer's and clients' expectations and needs is key to their success in clinical practice (1).

As the primary customer of the veterinary practice, clients' expectations and experiences are particularly important, especially as a large proportion of clients choose their vets through word of mouth and personal recommendation (2). Yet there is limited published research on client expectations (1). Some of the research that has been published suggests a mismatch between what vets may do in practice and what keeps clients engaged and satisfied. This mismatch can be complex to understand as clients may subjectively rate a certain trait as more important in a vet but in reality other traits may have a greater influence on relevant outcomes, including client satisfaction (3, 4). As an example of this, communication skills are one area that clients have rated as less important than veterinarians do when asked to rank the importance of a range of attributes (1, 5). In these studies, clients rated animal handling skills and rapport with their animals more highly. However empirical studies have shown that clients report higher satisfaction when veterinary surgeons are good at communicating and showing empathy with their clients, more so than to their animals (4).

Another area where good client relationships is of major importance for vets is in ensuring client adherence with prescribed treatments. Adherence to recommended patient care and home treatment is often lower than hoped which can have an impact on both patient care and client satisfaction (6). Several studies have indicated that this can be a consequence of vets adopting a more paternalistic or directive style when communicating with clients leading to poor client autonomy and motivation (3, 4, 7). Evidence suggests a more partnership-based approach can help make clients feel valued and empowered to support their animals in the best way (8), and that relationship-centred communication approaches increase client adherence (9, 10). However clarity and decisiveness in vets are also important, with a clear recommendation increasing client adherence seven-fold in one study (10).

From the veterinarian's perspective, difficulties with client relationships and communication have been reported to be a major challenge for veterinary surgeons (8, 11), particularly for new graduates (12, 13). Vets' satisfaction with consultations is also correlated with being able to express empathy to their clients (14). Difficulties with client relationships can be one factor that contributes to poor job

satisfaction and stress in vets and may lead to burnout, an issue seen in medicine and other healthcare professions (15). Poor job satisfaction and mental health due to stress is one reason why vets may decide to leave clinical practice. Attrition in veterinary careers is currently a major issue as evidenced by loss of vets from clinical practice often after a relatively short time in practice (16).

Aligned to the VetFutures report (16), the RCVS has established a Graduate Outcomes project to consider the skills and competences needed by future veterinary professionals, as well as what is needed to retain those professionals in a veterinary career. Such debates and conversations are facilitated by access to an up-to-date evidence base of information from stakeholders. This project has explored such evidence from the client perspective as part of a larger international research project, 'VetSet2Go^a'. The aim of the VetSet2Go project [<https://www.vetset2go.edu.au/>] was to define a veterinary employability framework and create educational resources for use by veterinary schools and graduates, with the aim of improving career satisfaction and long-term success of veterinary professionals. Evidence suggests that in order to achieve this satisfaction and success, understanding and meeting stakeholder needs is essential (17). Hence, the more we know and understand the current needs of both clients and vets, the better position we will be in to prepare our future colleagues for the profession.

The aim of this study was to investigate, using a mixed methods approach, the views of veterinary clients on what they expect from their veterinary surgeons, with a focus on what makes for a positive experience. Our objective was therefore to better understand current client expectations in order to both inform the profession and to aid educators in teaching veterinary students, helping them understand the needs and perspectives of their future clients and improving their client relationships.

MATERIALS AND METHODS

The study comprised of four stages, which are outlined in the flow diagram in Figure 1, and described further below.

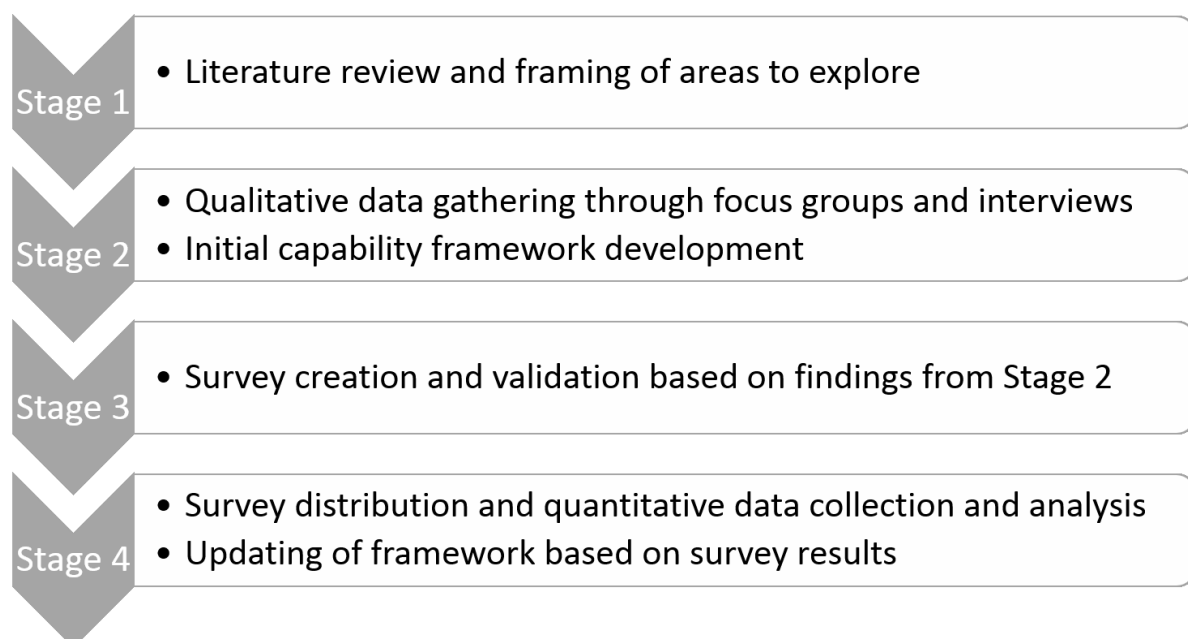


Figure 1. Flowchart depicting the four stages of data generation and analysis in this study.

Stage 1: Literature review

Following a comprehensive systematic review of non-technical (professional) competencies in veterinary graduates (1), the results were reviewed to identify existing evidence on the importance of professional competencies from existing competency frameworks, stakeholder surveys and empirical studies. This review was later referred to in Stage 2, where outputs were mapped to the initial framework.

Stage 2: Qualitative analysis and creation of initial framework

A series of interviews and focus groups were held with veterinary clients, to discuss skills and behaviours which they considered important in contributing to a quality veterinary experience. Participants were recruited through local contacts and practices and included farm, equine and small animal veterinary clients. Data were gathered across two geographic locations within the United Kingdom, until data saturation was reached. In total 46 clients of a range of veterinary practices from around Edinburgh and Nottingham were interviewed individually or in groups. The interviews were transcribed by an independent transcription company (Pagesix Transcription Services, UK).

Template analysis was performed by the Work Psychology Group (WPG) to develop a framework that defined capabilities related to client satisfaction and associated behavioural statements from the collected data. Template analysis is a well-established technique in qualitative research (18) and allows the researcher to thematically analyse relatively large amounts of data in a systematic and structured way. The 'template' is created as a list of codes that represent themes, which are organised hierarchically allowing a clear representation of associations between themes. Template analysis enabled the robust creation of a framework that presented both broad capabilities, as well as more granular behavioural indicators of each capability that veterinary clients may value or expect from their vet. The initial template was devised through independent coding of three transcripts by two WPG researchers followed by a discussion to achieve a consensus. Further coding was undertaken using the agreed template by both researchers independently and discussed again. At this point, the template was shared with the wider research team, followed by a card sort and discussion to gain consensus regarding the final number of broad themes and grouping of the behavioural indicators within each of these broad themes. Following final discussion, the framework was reviewed by a senior WPG researcher.

Following this, the results from the interviews and focus groups were also cross-referenced with the BEME systematic review (as referred to in Stage 1) to ensure all relevant behaviours had been captured within the framework (1). The final template comprised the initial framework of six capabilities and 41 corresponding behavioural indicators, was then validated using a survey, as outlined in stages 3-4.

Stage 3: Survey creation and validation

A survey was used to validate the initial framework created in Stage 2. The survey questions included asking respondents to rate the importance of each capability in relation to how important the behaviour or characteristic was to their satisfaction as a veterinary client, using a standard 5-point Likert scale (1 = Not important to 5 = Extremely important). Free-text questions were also included which asked if the respondent had any other comments on a particular capability or if there was anything missing in relation to any important behaviour indicator relating to a capability. Small scale piloting was undertaken with a small group of veterinary clients to finalise the survey. This was iteratively developed into an online survey using SurveyMonkey™ (a). The survey was piloted with a further 15 veterinary clients, and several changes were made as the framework evolved to a final

version. This was important to ensure language that would be appropriate to the context of clients from a range of backgrounds.

Stage 4: Final survey distribution and analysis

The final survey was distributed amongst UK veterinary clients and internationally. The survey was open for approximately one month. The survey was advertised through several routes, including social media, flyers, websites and forums, as well as species-specific magazines specifically targeting equine and farm clients. Quantitative data analysis involved calculating descriptive statistics, mean importance ratings for each capability, and the frequency of ratings for each capability. Means and frequency of ratings were also broken down and analysed based on animal ownership and country of residence. Qualitative data analysis was conducted by coding and grouping qualitative comments using content analysis into several super-ordinate themes relating to the capabilities. The results from the quantitative and qualitative data were then used to confirm the final framework.

Ethical approval

The study was reviewed and approved by the University of Edinburgh R(D)SVS Human ethics committee.

RESULTS

Capability framework developed from qualitative phase

Coding and analysis of the qualitative data in Stage 2 generated a 'Client Expectations template', which defined a number of capabilities and definitions of satisfaction (Table 1). These were then used as the basis of the survey and respondents were asked to rate how important each of the behavioural indicators and capabilities were to their experience as a client. Clients were also asked at the end of the survey which they considered the three most important capabilities to them.

Table 1. Framework of Veterinary Capabilities which was initially developed during qualitative phase. This is the post-survey version which has slight modifications based on the survey results.

Capability	Behavioural Indicator
Client Relationships	1.1 Is friendly, approachable and courteous
	1.2 Acknowledges your emotions and feelings; demonstrates empathy
	1.3 Shows compassion and kindness towards you; provides reassurance
	1.4 Respects your ideas, concerns and decisions
	1.5 Shows patience in difficult situations; ensures that you do not feel rushed
	1.6 Builds rapport with you to develop a trusting partnership
	1.7 Checks that you are comfortable with next steps and able to care for your animal appropriately
	1.8 Recognises the human-animal bond, including your insight and knowledge regarding your animal
	1.9 Educates you to take a proactive role in care and preventative treatment
	1.10 Is accommodating and flexible in meeting your needs and requests where appropriate
Professionalism	2.1 Shows equality in their approach; treats all kinds of animals equally e.g. small animals or farm animals
	2.2 Is honest and clear about the cost of treatment options or procedures (e.g. not led by financial gain or sales)
	2.3 Is fair; does not blame you or make you feel guilty

	2.4 Is professional in their appearance and approach, including when interacting with colleagues; is punctual
	2.5 Is open and honest with you; is realistic about long term expectations
	2.6 Is calm, manages their own emotions in difficult situations or conversations
	2.7 Maintains a hygienic working environment
Communication Skills	3.1 Tailors their communication to your understanding; avoids jargon and technical terms
	3.2 Clearly explains diagnoses, treatment options, implications and costs
	3.3 Asks open questions to gain information and explores your concerns
	3.4 Shows active listening and creates a two-way conversation with you; seeks your viewpoint
	3.5 Takes a considerate and tactful approach to sensitive information
	3.6 Shows good non-verbal communication skills, e.g. eye contact, nodding to show understanding
Decision Making and Problem Solving	4.1 Empowers you to make an informed decision by explaining all of the options available to you
	4.2 Balances your animal's needs with your needs, expectations and financial constraints
	4.3 Is proactive in treating the cause rather than just the symptoms
	4.4 Is decisive; quickly assesses the urgency of the situation and takes appropriate action
Commitment to Animal Welfare	5.1 Shows a genuine interest in your animal(s), asking questions about their needs or personality
	5.2 Handles your animal(s) with confidence and care, in a way that your animal(s) responds well to
	5.3 Shows compassion towards animals; prioritises your animal's wellbeing and quality of life
	5.4 Adapts the way that your animal is handled, and examined, to your specific animal
Commitment to Quality and the Profession	6.1 Prepares for your consultations (e.g. checking records beforehand) to ensure the highest quality care is provided
	6.2 Committed to good aftercare; is proactive in following up and keeps you updated
	6.3 Values continuity of care (i.e. provides you and your animal with the experience of a coordinated and smooth progression of care) and works with you to achieve this where possible
	6.4 Is open about when they do not know something
	6.5 Is committed to learning from their experiences or mistakes, so they can continue to improve your animal's care
	6.6 Gives you a sense of confidence in their skills
	6.7 Keeps up-to-date with the latest research and treatments
	6.8 Seeks advice from colleagues to ensure the best possible treatment for your animal(s)
	6.9 Is committed to delivering high quality care and striving for excellence

Survey response rate and demographics

1599 individuals accessed the survey, of which 1580 consented to their data being used. Of these respondents, 1443 respondents rated the importance of the first behavioural indicator and 1275 rated the last suggesting that a proportion of respondents did not complete the full survey. Since it is unknown how many people the survey reached due to the varying methods of dissemination, a response rate cannot be calculated. The breakdown of demographics by gender, age, country of residence and animal ownership is shown in Table 1.

Table 2. Survey demographics showing absolute numbers and percentages of those respondents who answered each question. Due to rounding, the percentages do not add up to exactly 100%. Additionally in the Animal Ownership Category question, respondents were able to choose multiple options; therefore each percentage is calculated based on percentage of the overall sample who selected each category.

Gender	Number	Percentage	Country of Residence	Number	Percentage
Male	124	9%	Australia	669	46%
Female	1312	91%	Canada	10	1%
Prefer not to say	9	1%	United Kingdom	722	50%
			United States	32	2%
Age			Other	15	1%
19 or below	39	3%			
20-29	186	13%	Animal Ownership Category		
30-39	208	14%	Equine	441	30%
40-49	291	20%	Farm	93	6%
50-59	359	25%	Small Animal	1375	95%
60-69	235	16%	Multiple Categories	397	27%
70 or over	116	8%			
Prefer not to disclose	15	1%			

Overall Importance of Capabilities

All capabilities and the behavioural indicators for each were rated as at least 'very important' by the majority of respondents with very few people rating any as less than 'moderately important' (Table 3). When the responses for 'extremely important' and 'very important' were added together, over 90% of respondents saw all capabilities as very or extremely important, except for 'Client Relationships' for which 82% of respondents rated it as such while 16% rated this as 'moderately important'.

Table 3. Overall importance of each capability showing the range, mean and spread of responses as absolute numbers and percentages. Again due to rounding, the percentages do not add up to exactly 100%.

Capability	All respondents		Frequency of Response Ratings (%)				
	N	% Very or Extremely Important	Not Important	Slightly Important	Moderately Important	Very Important	Extremely Important
Client Relationships	1446	82%	5 (0%)	21 (1%)	238 (16%)	579 (40%)	603 (42%)
Professionalism	1394	93%	0 (0%)	5 (0%)	98 (7%)	568 (41%)	723 (52%)
Communication Skills	1350	91%	1 (0%)	12 (1%)	107 (8%)	569 (42%)	661 (49%)
Decision Making and Problem Solving	1326	98%	0 (0%)	1 (0%)	24 (2%)	365 (28%)	936 (71%)

Commitment to Animal Welfare	1293	97%	1 (0%)	5 (0%)	34 (3%)	269 (21%)	984 (76%)
Commitment to Quality and the Profession	1273	97%	2 (0%)	3 (0%)	29 (2%)	351 (28%)	888 (70%)

Animal Ownership Category

Respondents who identified themselves as small animal owners matched the overall data and rated 'Commitment to Animal Welfare' as the highest capability in terms of perceived importance, and 'Client Relationships' as the perceived least important capability (data not shown). For those who identified with farm animal ownership, 'Commitment to Quality and the Profession' was the highest rated capability in terms of perceived importance and 'Communication Skills' were perceived as least important. Finally, for those who identified as equine owners, 'Decision Making and Problem Solving' was perceived as the most important capability and 'Client Relationships' as the least important.

Country of residence

When compared to the overall sample, respondents from the United Kingdom and Australia selected the same capability areas as being most important. Respondents from the United States and Canada selected 'Commitment to Animal Welfare' and 'Commitment to Quality and the Profession' as most important, which was in line with the overall sample. However, they also indicated that 'Decision Making and Problem Solving' was one of the most important capabilities, which differs from the overall sample, where 'Client Relationships' was selected. This difference should be interpreted with caution given the much smaller sample size of respondents from the United States and Canada.

Most Important Capabilities

Overall, when asked to select up to 3 of the six capabilities as most important to them, respondents most frequently selected 'Commitment to Animal Welfare', 'Commitment to Quality and the Profession', 'Client Relationships' and 'Decision Making and Problem Solving' as the most important of the six capability areas (Table 4). The least commonly selected were 'Communication Skills' and 'Professionalism'. There was again some variation by animal ownership category and country of residence as to the order of the most important capabilities as seen in Table 4.

Table 4. Most important capability by Animal Ownership and Country of Residence shown as absolute numbers (each respondent could choose up to 3 of the capabilities as most important to them). The capabilities are also ranked in order (from 1-6) for each category based on how many respondents chose it with the top three in bold.

Capability	Overall count	Animal Ownership			Country of Residence		
		Small Animals	Farm	Equine	United Kingdom	Australia	United States and Canada
Client Relationships	697 (3)	671 (3)	35 (4)	196 (4)	310 (3)	361 (2)	19 (4)
Professionalism	462 (5)	437 (5)	23 (6)	135 (6)	222 (5)	226 (4)	8 (6)
Communication Skills	446 (6)	424 (6)	29 (5)	137 (5)	217 (6)	210 (5)	13 (5)
Decision Making and Problem Solving	590 (4)	553 (4)	45 (3)	207 (3)	289 (4)	273 (3)	22 (2)
Commitment to Animal Welfare	787 (1)	760 (1)	46 (2)	227 (2)	386 (1)	375 (1)	21 (3)

Commitment to Quality and the Profession	785 (2)	744 (2)	53 (1)	240 (1)	384 (2)	361 (2)	31 (1)
--	---------	---------	--------	---------	---------	---------	--------

Qualitative survey comments on the capabilities

After each section of the questionnaire, respondents were asked if they had additional comments on that capability or if they felt there was anything missing relating to that capability. Following content analysis of the free text comments, qualitative data are presented in themes relating to the capabilities. This led to five behavioural indicators being updated based on the feedback received but no new behavioural indicators were identified from the data.

Client relationships (360 comments)

Within the 'Client Relationships' capability, comments related to clients wanting to be listened to and have their own knowledge and insights into their animal taken into account. This was also talked about in relation to trust and being able to trust the vet, but also have the vet trust the client and their judgement and understand the nature of the client's relationship to the animal. Some clients identified the difficulty in building trust when there was no consistency as to which vet they and their animal saw each time. The importance of showing empathy to the client in difficult situations was also mentioned as shown in the representative quotes below.

"I like to feel that there are two people looking after my cat, myself and the vet. It's a partnership." (Small animal (SA) owner)

"I can't stress enough how important it is to me to build a trusting relationship with my vet." (SA owner)

"Need the vet to be able to understand and differentiate between a much loved pedigree farm animal, a commercial farm animal and a pet." (Horse, Farm and SA owner)

"Difficult situations regarding your pets can be made that little bit easier by the way a vet treats you". (Horse and SA owner)

Professionalism (234 comments)

The comments on 'Professionalism' related to the need for vets to find a balance between acting professionally and being competent and human or empathetic in their approach. Some respondents, particularly farm clients, were more interested in competence than appearance. Flexibility in approach, honesty and openness were also mentioned as important.

"I think that although professionalism is important it should not override empathy for animal or owner." (SA owner)

"I would prefer a competent farm vet who gets the job done and is realistic about the outcomes. I don't care what they look like or how they are presented. (Farm owner)

"I think they should be professional but not at the expense of being approachable." (Horse owner)

Communication skills (219 comments)

Comments on this capability related to the ability of the vet to be responsive to each client and tailor their communications appropriately to the level of knowledge and interest of the client. This was

especially relevant when clients were upset or distressed. The ability to listen and use appropriate non-verbal communication were also valued.

"Don't avoid technical terms altogether... just tailor language to suit the client." (Horse and SA owner)

"Clear and concise communication is very important, especially in times of stress when I, as the client, may not be able to take in a lot of technical information." (Horse and SA owner)

"The vet needs to listen and allow the owner to know their animal." (Farm owner)

Decision Making and Problem Solving (161 comments)

Some respondents felt that veterinary clinical skills came above everything while others stressed the importance of a vet balancing the animal's needs with the client's needs, expectations and financial constraints. Respondents also felt it was important to treat the cause and not just the symptoms. They valued the ability to make quick decisions when necessary (particularly important in emergencies), but not at the expense of quality.

"Sometimes you can feel that you are being backed to a corner with only one solution to a problem which might involve more money than you can afford." (SA owner)

"I rank technical competence as the highest value by far." (SA owner)

Commitment to Animal Welfare (160 comments)

Displaying a commitment to animal welfare was described as the highest priority for a number of clients with some respondents suggesting it was more important for the vet to have a good relationship with the animals than with the client. This involved the vet taking time to get to know individual animals and their needs. Prioritising an animal's wellbeing over anything else was seen as highly important (even if this required addressing sensitive issues with the owner about the animal or its treatment). Several commented that commitment to animal welfare should be an essential attribute in order to enter the profession.

"It's much more important to me that the vet has a relationship with my pet and has empathy and respect towards her." (SA owner)

"People who do not care about animal welfare and individual animals should not become vets." (SA owner)

Commitment to Quality and the Profession (137 comments)

Preparation, follow-up and good organisation were seen as especially important to ensure continuity of care in practices where it is not possible for clients to see the same vet each visit. Respondents also placed emphasis on the importance of continued learning and keeping up-to-date with research. They also stressed the importance of the vet acknowledging their own limitations and knowing when to consult another vet or research an issue further.

"No vet can know everything about everything, but being open and honest and readily seeking advice only increases client confidence rather than diminishing it." (Horse, Farm and SA owner)

"Quality is important but within the context of reasonable cost and results." (Farm owner)

DISCUSSION

The aim of this study was to investigate veterinary client views on what they want or expect from their veterinary surgeons. Through qualitative interviews with a range of clients, a 'Veterinary Capability Framework' was developed which was then validated using an online questionnaire. Six key areas of capability were identified as important to the clients who participated in the qualitative phase: Client Relationships; Professionalism; Communication Skills; Decision Making and Problem Solving; Commitment to Animal Welfare; and Commitment to Quality and the Profession.

All but one of the capabilities identified in the framework were rated as very or extremely important by over 90% of the survey respondents indicating a high level of validation of the framework (Table 3). The capability with lowest overall score was 'Client Relationships', which was rated as being very or extremely important by 82% of respondents when asked to rate each individual capability, however this was considered the third most important capability overall when respondents were asked to choose their most important capabilities from the six (Table 4). So while the individual capability ratings suggest that 'Client Relationships' are not as important to some clients as the other capabilities, when respondents were asked directly which they felt were most important, it came out as one of the top priorities for at least some client groups. This variation could be due to the ordering of questions in the survey; the 'Client Relationships' capability came first and the overall rating was at the end and it may be that filling in the rest of the survey made respondents re-evaluate their priorities by the end of the survey. There is also some evidence that people respond differently to different types of questions used in research studies. When asked open, unprompted questions, respondents to a survey on what makes 'a good doctor' ranked interpersonal skills most highly but when given a list of attributes cognitive characteristics were identified as most important (5). This may account for some of the variation in responses to the two sets of questions. It also highlights the challenges of undertaking client satisfaction surveys when there is potential dissonance between clients thinking they know what they want rather than the reality of what they actually want.

The variation seen may also reflect the differing priorities of different types of clients, which need to be navigated. As shown in the results there was some variation in both the individual ratings of each capability and the overall 'top 3' as rated by different client groups. Small animal clients prioritised animal welfare, commitment to quality and the profession and client relationships most while farm and equine clients prioritised commitment to quality and the profession, good decision making and animal welfare with less emphasis on communication skills and client relationships. Some comments within the qualitative data reflected this variety between clients, with some respondents preferring a more 'human' empathetic approach to a detached clinical approach while for others the focus was on a good clinical outcome for their animal regardless of the vet's personality. It can therefore be challenging to decide what approach to take with a particular client, notwithstanding the essential aim of achieving a good clinical outcome. This highlights the importance of establishing from the earliest stage of the client relationship the client's own perspective on priorities in relation to their animal. In the interviews and survey comments respondents did not like having things assumed about them, whether it was that they would not want or be able to spend money on their animals or conversely that they were willing to pursue expensive and complex treatments. The key aspect highlighted was communication; that vets should discuss with clients what their priorities are, let them speak and ask questions, give them options and help them decide what is best for them.

Overall the three capabilities that were rated as the most important were 'Commitment to Animal Welfare', 'Commitment to Quality and the Profession' and 'Client Relationships'. These are similar to the overall attributes seen by clients as important in veterinary technology graduates (19) while varying slightly from the three most important qualities of a good vet as rated by small animal clients in a survey by Mellanby et. al. (5). In the Mellanby study 'knowledge about veterinary medicine and surgery' (69 %) followed by 'good with animals' (35 %) and 'compassion for patients' (32 %) were most

frequently mentioned however these fit broadly with the 'Commitment to Quality and the Profession' and 'Commitment to Animal Welfare' capabilities from the present study. In the Mellanby study vets and small animal clients were asked 'what makes a good vet' using a list of 20 attributes and were additionally asked for their top three while in the current study the capability framework comprised six overall capabilities and clients were asked for their top 3 from these six broad categories. The current study also included equine and farm animal owners, though these comprised a small proportion of the respondents, and they rated 'Commitment to Quality and the Profession' as the most important and 'Commitment to Animal Welfare' second whereas for small owners it was the other way round. In the interviews, it was clear that animal owners wanted to see the same level of respect for their animals and consideration of their welfare regardless of species. In this context however, it should be noted that clients may use different criteria to judge what constitutes animal welfare (Fraser et al 1997), and these differences may be far greater across multiple cultures. For example, farmers did not want vets to assume they did not care about their animals and to appreciate that they understood both the emotional and economical value of their animals. Equally other clients were impressed when their pet bird or hamster was treated as part of the family as much as a cat or dog would be.

The respondents overall ranking of the importance of the capabilities and associated comments led us to consider that for clients there may be a hierarchy of expectations, where some capabilities are considered essential while others are considered as valuable add-ons once the fundamentals are in place. It may be that for clients coming in to see the vet that their first priority for their animal is its safety and physiological needs and that once they see those being met, they can then prioritise their own psychological needs. In this we note some similarity with the premise of Maslow's widely-cited hierarchy of needs (20), leading us to propose (without endorsing that sometimes criticised model) a 'veterinary client hierarchy of needs' model (Figure 2). In this model the vet's concern for the animal's welfare and clinical problem-solving ability are essential priorities, but once these are established as a 'given', the vet's relationship with the client can come into play. However, clients' self-reported expectations should not be viewed as the only benchmark for the hierarchical importance of these capabilities, since communication and relational skills have been shown in multiple empirical studies to favourably influence outcomes including client satisfaction (4) and client adherence (9, 10). This is an area requiring future research and one potential way forward could be through Kano modelling, which seeks to identify the must-have or essential attributes, those attributes that result in satisfaction when fulfilled and dissatisfaction when not fulfilled (one-dimensional) and the attractive qualities that make clients come back to a practice again and again and recommend it to their friends. This method is employed in market research but is also increasingly being applied in higher education and service industries as a way to explore the needs and expectations of clients or students in a more robust way than simply asking them what they want given the caveats discussed earlier (21-23).



Figure 2. A proposed model for a veterinary client hierarchy of needs

The capabilities presented here show one view of what veterinary clients may want from their vets and it should not be assumed that this is an exhaustive list that if followed will guarantee a quality positive client experience for every client. Ultimately a veterinarian who meets client A's needs and expectations could fail to meet client B's needs and expectations even while demonstrating the same capabilities. This is important for educators to bear in mind when preparing students to deal with what may, at least initially, be an uncomfortable level of inconsistency. An additional area of challenge relates to another key theme from the interviews around the importance of vets not being seen to be motivated by money. Yet clearly from a business perspective, realistic charging is essential for sustainability and ongoing quality patient and client support. Both highlight the importance of gaining the relevant client's perspective both on their expectations and the financial implications from the earliest possible stage of the relationship, as discussed earlier.

In conclusion, this study has shown that clients particularly value veterinarians who display commitment to animal welfare and high quality veterinary care; are compassionate, open and honest; can provide clear explanations; and inspire confidence in their skills and knowledge (i.e. a balance of competence, professionalism and humanity). We propose a hierarchical model of client needs informed by data from this project.

These findings not only have relevance for client expectations and satisfaction but also for the wellbeing, satisfaction and employability of vets working in practice. Our model raises an interesting question about what an equivalent veterinarian hierarchy of needs would look like; and indeed whether the two would align. Exploratory data on what motivates people to become veterinarians (24) suggests that the desire to help animals and love of problem-solving challenges typically form stronger motivations than social connectedness, thus that vet expectations may indeed align favourably with client expectations.

To go some way towards translating these results into positive outcomes for clients and vets, data from this study in combination with outputs from the other VetSet2Go sub-projects is being used to develop an employability framework. In turn, this will inform the development of resources and tools to support students in developing these capabilities and understanding the needs of the various

stakeholders in the veterinary workplace, which will be shared openly through the project website (www.vetset2go.edu.au).

Figure legends:

Figure 1. Flowchart depicting the four stages of data generation and analysis in this study.

Figure 2. A proposed model for a veterinary client hierarchy of needs

ACKNOWLEDGEMENTS

This study was completed as part of the VetSet2Go project, supported by the Australian Government Department for Education and Training, grant number ID15–4930. The views expressed in this publication do not necessarily reflect the views of the Australian Government Department for Education and Training. The authors acknowledge the formative contributions of other VetSet2Go project team members within the broader project as well as Rachel Driver and Vicki Ashworth from the Work Psychology Group.

COMPETING INTERESTS

The authors declare no competing interests.

CONTRIBUTORSHIP STATEMENT

The project funding application and initial project design were conducted by Martin Cake, Susan Rhind and Liz Mossop along with other VetSte2Go team members. Research interviewees were recruited and interviews conducted by Kirsty Hughes, Carolyn Morton and Katy Cobb. Template analysis and development of the capability framework, survey administration and analysis were conducted by the Work Psychology Group (Emma Rowett, Máire Kerrin, Vicki Ashworth, Rachel Driver and colleagues). Piloting, final design and distribution of the survey was conducted by the whole team. The final manuscript was prepared by Kirsty Hughes, with input from the other co-authors.

FUNDING

This study was completed as part of the VetSet2Go project, supported by the Australian Government Department for Education and Training, grant number ID15–4930. The views expressed in this publication do not necessarily reflect the views of the Australian Government Department for Education and Training. The Funder was not involved in the project design or implementation.

NOTES

a. SurveyMonkey™ is a freely available survey design tool which is accessible around the world and commonly used for survey research. <https://www.surveymonkey.co.uk>

REFERENCES

1. Cake MA, Bell MA, Williams JC, Brown FJL, Dozier M, Rhind SM, et al. Which professional (non-technical) competencies are most important to the success of graduate veterinarians? A Best Evidence Medical Education (BEME) systematic review: BEME Guide No. 38. Medical Teacher. 2016;38(6):550-63.
2. Molhoek AW, Endenburg N. The effectiveness of marketing concepts in veterinary practices. Tijdschrift voor diergeneeskunde. 2009;134(1):4-10.
3. Bard AM, Main DCJ, Haase AM, Whay HR, Roe EJ, Reyher KK. The future of veterinary communication: Partnership or persuasion? A qualitative investigation of veterinary communication in the pursuit of client behaviour change. PLoS ONE. 2017;12(3):e0171380.
4. McArthur ML, Fitzgerald JR. Companion animal veterinarians' use of clinical communication skills. Aust Vet J. 2013;91(9):374-80.
5. Mellanby RJ, Rhind SM, Bell C, Shaw DJ, Gifford J, Fennell D, et al. Perceptions of clients and veterinarians on what attributes constitute 'a good vet'. Veterinary Record. 2011;168(23).
6. Aboud SK. Increasing Adherence in Practice: Making Your Clients Partners in Care. Veterinary Clinics of North America: Small Animal Practice. 2007;37(1):151-64.
7. Shaw JR, Bonnett BN, Adams CL, Roter DL. Veterinarian-client-patient communication patterns used during clinical appointments in companion animal practice. J Am Vet Med Assoc. 2006;228(5):714-21.
8. Coe JB, Adams CL, Bonnett BN. A focus group study of veterinarians' and pet owners' perceptions of veterinarian-client communication in companion animal practice. J Am Vet Med Assoc. 2008;233(7):1072-80.
9. Lue TW, Pantenburg DP, Crawford PM. Impact of the owner-pet and client-veterinarian bond on the care that pets receive. J Am Vet Med Assoc. 2008;232(4):531-40.
10. Kanji N, Coe JB, Adams CL, Shaw JR. Effect of veterinarian-client-patient interactions on client adherence to dentistry and surgery recommendations in companion-animal practice. J Am Vet Med Assoc. 2012;240(4):427-36.
11. Coe JB, Adams CL, Bonnett BN. A focus group study of veterinarians' and pet owners' perceptions of the monetary aspects of veterinary care. J Am Vet Med Assoc. 2007;231(10):1510-8.
12. Routly JE, Taylor IR, Turner R, McKernan EJ, Dobson H. Support needs of veterinary surgeons during the first few years of practice: perceptions of recent graduates and senior partners. Vet Rec. 2002;150(6):167-71.
13. Bachynsky EA, Dale VH, Kinnison T, Gazzard J, Baillie S. A survey of the opinions of recent veterinary graduates and employers regarding early career business skills. Vet Rec. 2013;172(23):604.
14. Shaw JR, Adams CL, Bonnett BN, Larson S, Roter DL. Veterinarian satisfaction with companion animal visits. J Am Vet Med Assoc. 2012;240(7):832-41.
15. Hojat M, Vergare M, Isenberg G, Cohen M, Spandorfer J. Underlying construct of empathy, optimism, and burnout in medical students. Int J Med Educ. 2015;6:12-6.
16. VetFutures. Taking charge of our future: A vision for the veterinary profession for 2030. 2015.
17. Bell MA, Cake MA, Mansfield CF. Beyond Competence: Why We Should Talk About Employability in Veterinary Education. J Vet Med Educ. 2018;45(1):27-37.
18. King N. Template Analysis. In: Symon G, Cassell C, editors. Qualitative Methods and Analysis in Organisational Research: A Practical Guide. London: Sage; 1998.

19. Clarke PM, Al-Alawneh J, Pitt RE, Schull DN, Coleman GT. Client Perspectives on Desirable Attributes and Skills of Veterinary Technologists in Australia: Considerations for Curriculum Design. *J Vet Med Educ*. 2015;42(3):217-31.
20. Maslow AH. A theory of human motivation. . *Psychological Review*. 1943;50(4):370 - 96.
21. Arefi M, Heidari M, Morkani GM, Zandi K. Application of Kano Model in Higher Education Quality Improvement: Study Master's Degree Program of Educational Psychology in State Universities of Tehran. *World Applied Sciences Journal*. 2012;17(3):347-53.
22. Nilsson-Witell L, Fundin A. Dynamics of service attributes: a test of Kano's theory of attractive quality. *International Journal of Service Industry Management*. 2005;16(2):152-68.
23. Lin F-H, Tsai S-B, Lee Y-C, Hsiao C-F, Zhou J, Wang J, et al. Empirical research on Kano's model and customer satisfaction. *PLOS ONE*. 2017;12(9):e0183888.
24. Cake MA, Mansfield CF, McArthur ML, Zaki S, Matthew SM. An exploration of the career motivations stated by early career veterinarians in Australia. *JVME*. 2018;In press.